

THE C4 NEWSLETTER

Colonial Coin Collectors Club

Rhode Island Ship Medal



Fall, 1997

Volume 5 Number 3



The C4 Newsletter Volume 5 Number 3
A quarterly publication of
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Ads for this newsletter can be purchased as follows:

	1 issue	2 issues	3 issues	Copy size
1 page	\$50	\$75	\$125	4-1/2"x 7-1/2"
1/2 page	30	45	75	4-1/2"x 3-3/4"

If you want to include a photo with your ad at an additional \$10. Black and white photo needed, size can be adjusted to fit. Please send check with your ad. We can accept camera ready copy or any Microsoft Word compatible computer file.

All members also have the right to include a free classified ad in the newsletter of up to 13 lines.



Cover photo

Rhode Island Ship Medal in Pewter- Garrett sale lot #1328.



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Editor's Notes

by Angel Pietri

Welcome to this fall issue of the newsletter. In these pages you will find several articles on both general colonial topics as well as more specialized material. I would like to thank all the recent submissions of material, and urge you all again to continue supporting your newsletter.

The convention is fast approaching. In here you will also find the most recent information on it. As you will see, we should have a very interesting set of educational activities. And of course there will be the auction on Saturday night. In addition you will have the chance to meet and share with many of your fellow collectors, which, as many of you know, can be one of the most rewarding aspects of these conventions. Besides, Boston is a very appropriate venue for a colonial related activity. I hope to see many of you there. If you have not done so yet, I would encourage you to make plans to attend.

During the past few months, I have had the chance to attend a couple of auctions (Stack's June sale and Bowers and Merena's Rarities sale). The interest in colonial coins certainly seems to be very strong as evidenced by the floor bidding activity and the prices realized. I

have managed to buy a few pieces for my collection but with some pretty fierce competition.

Most of you have already paid your dues for this year. In your mailing label, next to your name you will see a number if you are paid up. The number indicates the year up to which you are paid up. If you do not see a number, it means I do not have any record of your payment. If so, please do not forget to send your dues in soon. Otherwise, this will be the last newsletter you receive. In addition, you may not be able to bid at the club's auction. If you do not see a 97 or higher next to your name but have sent your payment already, please accept my apologies. Send me a note or call me at 941-275-8054 so we can straighten our records out.

As to the photofile, we presently have over 1,000 photos. The biggest bulk is made up of New Jersey coppers, of which we have over 750. Bobby Martin, who has one of the largest data bases on Connecticut coppers, has agreed to take over the Connecticut part of the photofile. This should supplement very nicely his data base. The Fugio photofile will be in the hands of David Palmer. As usual, we will strive to maintain a duplicate set of photos, one at the library, and one currently with Bobby Martin(Conn.), David Palmer(Fugios), or me(others). We will be photographing coins at the C4 convention, and would appreciate it if you can bring your gems and/or rare pieces to be photographed. If you are interested in seeing these, contact Steve Tanenbaum.

Our treasury continues healthy. In September, 1996, we started the new account with \$15,043. Since then, we have had revenues from dues, sales, the convention and last October's auction totaling \$12,239, with expenses of \$6,811 (newsletter, photofile, library, convention, postage, supplies and miscellaneous). This brings our current balance, before paying for this issue, to \$20,471. By my estimates, we need to continue working to try to achieve a balance of around \$40,000. This would allow us to earn enough interest to support most of the club's basic functions, and allow us to expand our scope significantly. At the present pace, we may be able to achieve this hopefully in the next four to five years.

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Thank you all for your support! Remember that this is your club!



Message from the President

by Dennis Wierzba

The C4 meeting at the ANA show in NYC was reasonably well attended given its late hour and hard to find location. It was a good “open” meeting with plenty of audience feedback. The two main topics were the Boston convention and the new Vermont book.

Speaking of Boston, we need volunteers to help with M+G lot viewing. I am coordinating this on their behalf. Please call me at 908-464-4684 if you call help. Michael Wierzba will be preparing the schedule of duties. If you have a time preference, let him know.

As you receive this journal, Tom Rinaldo will be finishing the cataloging of the C4 sale. There is a chance that a few high-valued colonials could be added to the sale at this late date but check with Tom at [REDACTED]. Please refer to the articles in this Journal for further information on the Boston convention, especially the educational forums. Convention questions can be answered by Region 1 representative Jim Skalbe at [REDACTED].

Because of the addition of new photo material and manuscript editing, the Vermont book by Tony Carlotto will NOT be ready by November. Our new target date is the Boston EAC in 1998. We will have a table to promote both the book and the club.

See you in Boston!



C4 Convention Items for Sale

Silver Second Convention Medals \$20

Copper Second Convention Medals \$5

Hardbound Scott Barnes Catalogs \$50

Add \$1 postage and handling for Medals and \$3 for catalogues. All will be sent uninsured at buyer's risk. If you want insurance, add an appropriate amount. Please forward your check to Dennis, payable to C4, at the address below.

The Richard Picker Collection Lot Envelopes

As mentioned in the last issue of this newsletter, Stack's has provided C4 with Picker's own customized envelopes from his collection sold in October, 1984. They are available from the club for \$5 each if you can show adequate proof that you own the coin. This \$5 donation is for the club's treasury, thanks to Stack's. All unsold envelopes will be returned to Stack's. If you own any of these coins and would like to own the envelope, contact me at the address below.

Dennis Wierzba



The John Hull book is sold out! We again thank Harvey and Larry Stack for their donation of these books to C4.



Letters to the Editor

Suggested Topics for the C-4 Newsletter

I joined the C-4 club because of an interest in copper coins and particularly the early United States colonial period. It would appear from the previously published articles that the majority of C-4's membership is comprised of very knowledgeable and devoted copper Collectors. Is there room in the newsletter for a section oriented to the novice collector? The C-4 Newsletter is an ideal forum to educate the beginning collector. This section could be used to document basic and little known identification characteristics of the various colonial coins. I have collected numerous "Bungtown" tokens, counterfeit tokens and several Machin mills pieces. I have several pieces that seem to have characteristics of two or more pieces. I have purchased several books that describe these coins in general but none of them go into specific identification detail. Several articles that I have read refer to a specific style of lettering that is characteristic to a group of coins. Would it be possible to have members submit articles to the C-4 Newsletter that would describe and if possible reproduce these characteristics. I would like to see an article that compares the lettering styles of British half pence, "Bungtown's", Machin mills and counterfeit coppers. An article on the various styles of George III or Britannia that were used on these coins would be useful. Maybe the C-4 Newsletter could serve it's membership by sharing newly discovered characteristics. The articles to date have been interesting and I have truly enjoyed them. Please keep in mind that some of us are still learning the basics of the colonial copper coins and any help the experienced members could give us will be greatly appreciated.

Thank you,
Dan Burleson

Editor's Note: We appreciate Dan's input, and we welcome such inquiries. Our newsletter depends on voluntary contributions from its members. Hopefully inquiries like this one will serve as stimulus

to some of you to put together some articles to help guide the beginning collector.



The Beach-Grunthal Hoard and Vlack 14-84A

I must admit that I was quite surprised by Dennis Wierzba's suggestion in the last issue (Summer, 1997) of the C4 Newsletter that the source of Vlack 14-84A may be "closer to Montclair (NJ), such as Machin Mills or NYC." Having read John Kleeberg's reconstruction of the Beach-Grunthal hoard, I don't recall him having made this assertion, although I do believe he may have erred in including this variety as it did not exhibit the "curious yellow green patina" of the other examples. I was glad to see that Mr. Kleeberg had taken into account my Technical Note, published in the Nov. 1994 Colonial Newsletter, in his research. However, I can not agree with his conclusion that the occurrence of V14-84A in old collections is ample evidence that its provenance is American.

Much, if not most of the published research on this variety has been done by Eric P. Newman. To put Mr. Newman's research into its proper perspective, perhaps we should compare it with what he has said of the 1785 dated varieties, and then compare this to what we know now about both dates.

The first mention of V14-84A was a catalog listing of the variety by D.T. Batty of Manchester, England, published in his Vol.3 in 1886. The next mention of V14-84A came in 1929, by L.F. Hammond, then again by American researcher Robert Vlack in his 1974 photo-plates. Newman's postulation that V14-84A is attributable to the locale of North Swansea, Mass., relies heavily on a report in the "Providence Gazette" of April 17, 1784, stating that counterfeit halfpence were then believed to be being coined in southern Mass., and the curious coincidence of a man from this area having been caught passing "mixed metal" counterfeit halfpence in Boston in Feb. of 1786. Beyond this, the only other evidence Newman offers is that it "displays obvious unskilled workmanship compared to British

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made counterfeits."

The first mention of a 1785 dated counterfeit (Betts-4) was made by Wyllys C. Betts, coincidentally, published in 1886 in New York. I believe the next published material on this variety was by Mike Ringo & Gary A. Trudgen in Technical Note 101, in the June 1985 Colonial Newsletter. Then, of course, it is discussed by Newman, in ANS Museum Notes #33 published in 1988. Newman's postulation that the known varieties of the 1785 dated pieces were counterfeited in England, specifically for American use, is based largely on the quality of workmanship and the assumption "that no distribution, circulation or use in Great Britain ever occurred."

Bill Anton, in his "Forgotten Coins...", published in 1992, states on page 44 that his 1785 dated specimen came from England and that he also has knowledge of two other specimens in English collections. We now find the circumstance of both V14-84A and the 1785 varieties relative occurrences in England and America are essentially the same. Although two different theories can be born out of the same set of circumstances, perhaps an alternative theory may be that both V14-84A and the 1785 varieties were produced in England, with the majority of specimens ending up as "hardware" headed for the former Colonies in the years just prior to the Coppers Panic of 1789.

This still leaves us with the basic assumption that crude workmanship means American provenance. This is no longer a valid argument. I am still not sure where the line should be drawn between crude and skilled but I do know that some of the crudest designs can be linked to Evasion series. The diversity of dates and design styles of counterfeit halfpence and farthings, including the Evasions, would indicate that the counterfeiters relied more on the apathy of the public, rather than their ignorance.

Vlack 14-84A is unique among the known evasive dated counterfeits for the decade of the 1780's. It is far cruder in design than the Machin/Atlee issues, while the 1781 & 1785 dated varieties are much more sophisticated. Vlack 14-84A is unique, not only for its style but

also for its date. I don't believe that we can be certain where it came from, therefore I also remain unconvinced that it is uniquely American.

Another enigma is Vlack 10-77A, and the unfimbriated Union Jack. Although Mr. Kleeberg incorrectly states, in footnote #8, that I suggested that it is punch linked to Evasions, single or solid crossbars is a trait shared by some Evasions, as well as a few other varieties of counterfeits. This remains a yet unexplored possibility. I once entertained the notion that V10-77A may be a counterfeit of a counterfeit, but have long since dismissed any similarities to the Machin/Atlee issues as coincidental. Perhaps other more insightful alternatives may come forth with time.

Perhaps my views on counterfeit halfpence seem pretentious, but if more accurate knowledge about them is to be gained, they should be looked at from a scientific standpoint. We can rely only on new discoveries, or re-discoveries, and what has been written about them. I have devoted considerable time and thought to them and enjoy re-exploring old theories and hearing of new ones. To me, this is what Numismatics is all about. Thank you.

Sincerely,
Byron K. Weston



C4 Educational Program for November 1997 C4 Convention

Our thanks go to Jim Rosen for organizing the following program for our upcoming convention. Friday evening will be taken up by the state coinage symposia. This was pioneered by Ray Williams with the New Jersey Symposia. Last year we added several of the other colonial series, and it proved to be a very popular activity. We are repeating this year, this time with even more series covered. The Saturday activities will be more traditional lectures, but this are also

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run in a very informal manner with as much audience participation as desired by those present. The whole program should be very educational and entertaining.

Friday November 7, 1997

Dennis Wierzba, Ray Williams-	5pm -7pm 3rd NJ Symposium
Dick August, Ed Sarrafian-	7:10-7:50 Machin's Mills
Tony Carlotto, Jim Rosen-	7:55-8:35 Vermont's (the dotted R-16)
Jim Skalbe-	8:40-9:30 Mass. Silver
Mike Packard, Tom Rinaldo-	9:35-10:15 Mass. Copper
Jim Goudge-	10:20-11:00 Connecticut's

Saturday November 8, 1997

Dan Freidus-	10:00-10:50 Collecting colonial coins for the beginner
Bobby Martin-	11:00-11:50 Grading colonial coins, a different perspective



Third Annual C4 Convention- Practical Details

Dates: November 6-9, 1997, in conjunction with Bay State Show.

Place: Radisson Hotel, Park Square, 200 Stuart Street, Boston, Ma.

Room rates at the Radisson Hotel: \$100 for single room, \$110 for double room. Rate guaranteed for Nov. 6-9 only. It does not apply to the rest of the week. Only a limited number of rooms are available at this rate, so make your reservation quickly. Phone 800-468-3557. For information on other nearby hotels call Ed Aleo at phone number [REDACTED]

<u>Bourse schedule:</u>	<u>Dealers</u>	<u>Public</u>
Nov. 6	4:30-8:30PM	None
Nov. 7	8:30AM-7:00PM	10:30AM-7:00PM
Nov. 8	10:00AM-7:00PM	10:30AM-7:00PM
Nov. 9	10:00AM-7:00PM	10:30AM-4:00PM

Auction by M&G: Saturday, Nov. 8, 7:00PM



Miscellaneous Ramblings (with a proposed die state progression sequence for NJ Maris 77-dd)

by Tom Madigan

We all pay our yearly dues to belong to C4, and what do we get for our \$20? Four copies of this Newsletter and the opportunity to attend an annual convention of our own that, to many of us, involves paying a hefty airfare to get there. I had the good fortune to attend my first convention in New Jersey last October and had an absolute blast. Therefore, I fully intend to attend all future conventions, wherever they are held, until the day I croak. I am only 46, so I expect to be around for quite some time. And of course, it wasn't just the coins. It was the fellow members who showed up and became actual people who share a common interest instead of faceless names one reads about somewhere. Oh yeah, and a great auction courtesy of Chris 'n Bob.

But what about the newsletters, which are the only tangible things you get for your dues, if you do not attend the conventions? Personally I think they are a bit on the thin side, and so I very much appreciate the time and effort put in by those who have contributed articles in the past. Therefore, in the interest of keeping the C4 Newsletter fatter than it has been, I decided that I should do my bit and contribute something, instead of quietly grumbling to myself about the dearth of copy. I know that our newsletter is not exactly the right forum for lengthy and learned research articles; the CNL already handles those. In fact Mr. Spilman rejected my article on the

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New Jersey die states, which is why that series appeared in Penny-Wise (thank you Harry Salyards). It was not very learned, but it sure was lengthy! It is my opinion that articles that are related to colonial and state coinage would be better suited to this newsletter than in the pages of Penny-Wise. Or, so as not to detract from Penny-Wise, one could write two versions of the same article; a very detailed version for this publication and a simpler version for Penny-Wise. But anyway, back to the point, I do not have any major or erudite article or story to contribute, even though I want to. And neither am I a great writer or numismatic researcher. But I do have a few thoughts I would like to express, so I figured I ought to. It is my hope that my fellow members will be encouraged enough that they will pound something out and submit it to our editor for publication, so we all wind up with a fatter and more interesting newsletter. In fact, I hope to be able to come up with enough "stuff" so I can submit a page or two per issue. So here goes.

To whoever it was that nominated me for Treasurer, I thank you. I am honored. To those of you who voted for me, I thank you. To those of you who voted for Angel instead, I thank you too because you cared enough to vote.

To those of you who own high grade and/or rare New Jersey varieties who will be attending the convention this coming November, I'll be very grateful if you bring your gems along with you and allow me to take some notes and photograph them, as I am still gathering data on the NJ die states.

Does anyone have a Maris 21-O without a crack in * PL ? I have not been able to find one with a perfect reverse.

Do all New Jersey collectors know that the sole 85-nn is a recut specimen of a Maris 56-n? Yes, it is an altered counterfeit! Therefore it should be delisted as a separate variety. You can read about it in Penny-Wise Vol. XX, issue #5, page 215.

I have no attribution data for Maris 4 ½-pp, or the obverses 29 ½, 72 ½, and 73 ½. Does anybody have a description of these, or better yet a photograph?

At the New Jersey symposium last October, I overlaid a slide of a Maris 77 obverse with a slide of a 78 obverse, and these were projected into a screen, clearly showing that each letter of the legend as well as the horse and plow were identically positioned and identically shaped and so forth, thus proving that 77, 77 ½, and 78 are one and the same die, and that therefore Maris 77 ½-dd and 78-dd should also be delisted as separate varieties. Not a single person in the audience made any comment about this one way or another, so I guess it was really not news. Ah, well! But I am curious as to the relative rarity of the different die states for M. 77-dd, which I have worked out as follows:

0: OBV: Perfect (wide plowshare with a line midway through its length as if there is a thinner upper section, clearest on Taylor: 2286).
REV: Perfect (B&M Mar90: 1280).

I: OBV: Perfect
REV: Slight buckling in center.

II: OBV: Perfect
REV: Clashmarks clearly visible under UR, S, and neighboring quatrefoil.

III: OBV: Crack from rim to top of C; plowshare mushy but still full width.
REV: Clashmarks fade, only a faint impression of the end of the plow beam and part of the singletree incuse under S.
(Stack's Oct89: 146).

IV: OBV: Crack through C now touches mane; plowshare has been re-engraved showing the barest trace of the outline of the upper part (clearest on Garrett:1483) and there is a definite bulge where the share joins the handles (clearest on Taylor: 2287).
REV: as in III.

V: OBV: High raised mound on horse's neck and into the field below it which has regularly spaced serration along its left (vertical) edge, as if from a cogwheel that got smashed between the obverse die and the planchet. Lower half of lower plow handle and left end of exergue line missing; right end is thinner; NO and both lower quatrefoils are partly effaced, and the upper crack now only goes from rim to bottom of C. This can only be the result of die grinding to try to make the damage less noticeable.

REV: Clashmarks under UR, S and quatrefoil now faded or obliterated; new clashmarks visible along right upper edge of shield chief (Maris 77 ½-dd) (B&M Mar92: 1449, EANA Apr96: 69).

VI: OBV: Crack from rim diagonally through second 8 to right tip of beam; another parallel crack to right; heavy die scratch (?) from near base of N straight across through AE to rim; die sinks at AE.

REV: Die damaged as if it had come down on something hard, causing flattening of the lines on the left half of the shield with a straight ridge on top of the left shield edge and a large bulge at the bottom. This ridge is exactly opposite the obverse damage in upper left quadrant (Maris 78-dd).

VII:OBV: As above (VI).

REV: Clash marks fading; break through S, quatrefoil, bottom of U and up through NU; State VI damage is now resulting in the die, giving way the right of the ridge, especially at the bottom (B&M Nov91: 238).

Maris 77-dd and 78-dd are supposedly rarity 2, while there are nine known 77 ½-dd's (i.e. die state V). But what is the actual breakdown per die state? Who of you have what and how many of them? Good excuse to look at your coins again. Are they all gray and granular?

Is it true that more than half the Vermont RR-16's are holed?



English Money in Colonial America

by Russell Easterbrooks

When dealing with commerce between two countries, all the articles of trade are valued in established currencies of both countries. The commerce between England and her majesty's colonies in America utilized the English monetary system. Yet, from very early on, English laws were established to limit gold and silver coins from entering the colonies. Barter or bills of exchange was the English way of paying for colonial exports. England's theory (mercantilism) was that the colonies existed solely for the benefit and prosperity of England. Until the revolution, the colonies were under this yoke of English trade laws, which suppressed foreign trade.

These laws successfully created a shortage of English money in the colonies. So disliked were these trade laws, that smuggling was considered an acceptable practice by the colonies. Pirating may have provided one of the first influxes of foreign coins and luxury goods into the colonies.

As early as 1646, pirates were known to have anchored in colonial harbors, as we see from William Bradford's journal, "Of Plymouth Plantation". "About ye middle of May, this year (1646) came 3 ships into this harbor, in warlike order. They were found to be men of war. The captain's name was Crumwell, who had taken sundry prizes from ye Spaniards in ye West Indies. He had aboard his vessel about 80 lusty men. They continued here about a month or 6 weeks, and then went to ye Massachusetts, in which time they spent and scattered a great deal of money among ye people. This captain Crumwell set forth another voyage to the West Indies, from the Bay of the Massachusetts, well manned and was out three years and took sundry prizes and returned rich unto the Massachusetts, and there died the same summer."

These pirate ships often sailed under the flag known as the "Jolly Roger", and many Mexican, Spanish and English ships were plundered. Interestingly, the expression "Jolly Roger" is believed to refer to the English reference to the devil as the "old Roger".

Edmond Randolph, England's Surveyor General of customs in the colonies said in his report of 1696 that "pyrates" were actually welcome in all colonial ports, and he listed those of Massachusetts, Rhode Island, Pennsylvania and Carolina as being the worst offenders. He also charged in his report that Rhode Island had become the "chiefe refuge for pyrates", and that Carolina Governor John Archdale "favors illegal trade".

The early void of English money in the colonies was quickly filled by many foreign coins through pirating and illegal colonial trade with the West Indies. One interesting example of this can be seen in the estate of Captain George Corwin, found in the Essex County Court Files. Corwin was a wealthy Salem shop owner who sold fabrics and hardware beginning about 1651. After his death in 1684, an inventory was taken of his estate which amounted to 5964 pounds, 15 shillings! In looking over the inventory records, Corwin's cash chest contained the following: "New England money, 49 pounds, 18 shillings; English money, 45 pounds, 6 shillings; and in pieces of Eight, 1519 pounds, 1 shilling, 8 pence". The reference to New England money was of course coins from the Massachusetts mint.

By the early 1700's England clearly recognized the large amount of foreign coins circulating in her colonies. In the year 1707, there was an act of parliament "for ascertaining the rates of foreign coins in her majesty's plantations in America" . At this time it appears the Spanish dollar and its parts formed the principal circulating coins in the colonies.

Early New England newspaper accounts show a lack of coinage for commerce in the colonies. These accounts may have been meant to indicate that the use of foreign coins was as a necessity for the lack of English money. The value of these foreign coins, translated into English monetary terms, created much confusion in the New England market place.

Scarcely in any two colonies were foreign, and some years later state minted coins, represented by equal values. Farmers Almanacs of the

times displayed tables of sterling value and weight of foreign coins as they pass in their respective colony or state. These guides were important in keeping people informed of the changing value of foreign coins, when buying English or colonial goods.

In the year 1821, John Quincy Adams, as Secretary of State, submitted a report on Weights and Measures to the House of Representatives. In this lengthy report he states: "It is now nearly thirty years since our coins and mint have been established. Introducing the principle of the decimal divisions, we said a tenth - part of our dollar shall be called a dime, a hundredth part a cent, and a thousandth part a mille. But the dime having been seldom, and the mille never, presented in their material images to the people, have remained utterly unknown. In some places in this country dimes have been received for more than they were worth, and have passed for an eighth, instead of a tenth part of a dollar. Even now, at the end of thirty years, ask a tradesman or shopkeeper in any of our cities what is a dime or a mille, chances are four in five that he will not understand your question. But go to New York and offer in payment the Spanish coin, the unit of the piece of eight, and the shop or market-man will take it for a shilling. Carry it to Boston or Richmond and you shall be told it is not a shilling but nine pence. Bring it to Philadelphia, Baltimore, or the city of Washington, and you shall find it recognized for an eleven-penny bit; and if you ask how that can be, you shall learn that, the dollar bring of ninety pence, the eighth part of it is nearer to eleven than to any other number. And thus we have English denominations most absurdly and diversely applied to Spanish coins."

The use of English terms continued in America to a lesser degree, until the act of 1857, whose object was to retire from circulation Spanish and Mexican and other foreign coins. Mint Director James Snowden said in his mint report of 1859 that, "Our circulation is thus being rid of a foreign currency which interferes with own excellent system of decimal coinage. It is to be hoped that this reform in our circulation will lead our people to adopt the language of our system, and abandon terms like "shilling" which never had a place in our coinage".

This use of English monetary terms to value foreign trade goods, as well as coins in this country, even many years after the Revolution, further establishes the strong monetary traditions England instilled in her colonies despite the relative scarcity of English coins. As more colonial records are researched we can only hope new information will shed more light on questions concerning this scarcity of English coins in early America.



Colonial Red Book Type Collecting

By Leo Shane

Most of us Colonial collectors have not been fortunate enough to inherit a collection of coins. Also, very few of us have had the finances to purchase an existing collection of significant size at one time. I believe it is safe to say that the vast majority of us have started collecting colonials one coin at a time. Somewhere in our past we purchased that first Colonial coin that caught our eye and from there our interest grew.

After having collected coins since age 7 (back in the late 50's), the first colonial that peaked my interest was a nice Fugio Cent which I purchased in 1980. Who wouldn't be interested? After all, it is the first coin authorized by the fledgling United States government and isn't that the rising sun from Ben Franklin's chair on the coin?

When collecting the regular issue U.S. coin series, as I did for many years, you know when your collection is done when you've filled every hole or checked off every coin on the list. Collecting colonials has a distinct advantage over this type of collecting in that there are no colonial folders to put coins into and every collector is able to define what he or she feels should be included in their collection. My first criteria for collecting colonials was to buy only coins that were actually minted in the colonies. It became my goal to buy a Connecticut copper, followed by a New Jersey, Vermont and a Massachusetts copper. Of course a Pine Tree Shilling had to be

purchased as this is the first true colonial coin. During my search, Head left, Head right, Laughing head, Baby head, Britannia, Wide shield, Outlined shield, Running fox, Half cent, Cent, and No period after Mass. were only a few of the descriptions I began to see on coin holders and in ads for Colonial coins. Obviously, these are different types within a series or in some cases different die varieties. What does this all mean to the budding Colonial collector?

At this point, some of us choose a particular series (i.e.: Vermont issues) and try to assemble a collection of every die variety. This is a fascinating way to view and study individual engraver's styles and their interpretation of what is supposed to be the same representation of a description in the law authorizing them. Some collectors devote their time to assembling and categorizing die states. Still others study errors and other minting anomalies and try to define how they occurred. Research into striking sequence and mint location is yet another way to spend leisure time in a rewarding endeavor. Many times, these collectors tailor their collections to illustrate the area which is of greatest interest to them. While respecting all of these efforts, I myself do not have the time and patience needed to persist in some of these more intellectual pursuits. I am by nature a generalist and enjoy learning a little about many different things but do not need detailed information in any one particular area. With a middle class income, I also do not have the pocketbook to pursue a complete die variety set of any series. Where does this leave me?

Most collectors have a sense of trying to complete something. We need a goal to strive for so we know when we've accomplished it and can move on. For those in a situation similar to mine, I would like to suggest the Colonial Red Book type set as a worthy goal. What is a Red Book Type Collection? In simple terms, for any series, every coin and variation listed in the Red Book represents a different type. For example, pages 39-40 of the 1997 red book lists the Massachusetts series. Page 39 lists one half cent and three cent types. Page 40 lists one half cent and two cent types for a total of seven Massachusetts types needed to complete a Red Book type set.


Collecting by type satisfies the diversity some of us want and the

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finances we can afford. Collecting Colonials by type is by no means a trivial goal and many years of searching and thousands of dollars will be needed to put together an attractive medium grade set in any series, just ask Jim Goudge. At the C4 convention in Oct '96 he exhibited a beautiful Red Book type set of Connecticut coppers (actually almost two sets as he had coins showing the obverse and reverse). Some of the very rare coins were in Fine condition but most others were VF to AU. I didn't ask but I'm sure Jim spent many years assembling this set and is rightfully proud of his accomplishment.

I am currently pursuing Red book type sets for Vermont, Massachusetts and Connecticut coppers. I may never finish them but the joy is in the hunt. While pursuing this, I have come upon one problem. In looking through dealer cases, auction catalogs, and ads, I needed to develop a quick and easy way to identify what coins I need. Most colonial dealers identify coins by Miller (Connecticut), Maris (New Jersey), Ryder (Vermont & Massachusetts), Kessler (Fugio) or other reference numbers. There is however, no quick reference that I'm aware of that relates these references to the individual line items which make up a Red Book type. I therefore have developed a quick reference list of my own which some of our membership may find useful. For no other reason than to share my efforts with others (much like those who freely share their research through this and other newsletters), I humbly give you my quickfinder. What follows is a list of the 7 types of Massachusetts coppers (Figure 1) and the 13 Vermont types (Figure 2) listed in the Red Book and their corresponding Ryder numbers. I have also grouped Ryder numbers by rarity to give the type collector a sense of which coins will command a premium. My thanks to Mike Packard and Tony Carlotto for the rarity ratings and for their comments in helping me put this list together.

I hope some will find this useful. Any and all constructive criticism is appreciated. Any one wishing to correspond with me about my chosen way of collecting can write to me at the following address:



**FIG. 1 MASSACHUSETTS RED BOOK TYPE SET
 7 RED BOOK TYPES**

RARITY R - 1 to R - 3 R - 4 to R - 5 R - 6 to R - 8

RYDER NUMBER

1787 Half Cent	R.4-C, R.5-A	R.1-D, R.2-A R.3-A, R.4-B	R.4-D, R.6-A R.6-D
1788 Half Cent	R.1-B	R.1-A	
1787 Cent	R.3-G,	R.2b-C, R.2b-E R.4-C, R.4-D R.6-G	R.1-B, R.2b-G R.4-J, R.5-I R.7-H, R.8-G
1787 Cent - Arrows in Right Tallon			R.2a-F
1787 Cent - Horned Eagle	R.2b-A		
1788 Cent - Period After Mass.	R.1-D, R.8-C R.10-L, R.12-M	R.2-B, R.3-A R.3-E, R.4-G R.7-M, R.11-C R.11-E, R.11-F R.12-I, R.15-M R.16-M	R.9-M, R.12-H R.12-K, R.12-O R.13-I, R.14-J R.17-I
1788 Cent - No Period After Mass.	R.6-N	R.13-N	

Note 1 Rarity ratings taken from the listing presented by Mike Packard at the C4 convention October 1996 and are based on the Sheldon scale

Note 2: Half Cent 1787 R.7-D added after Ryder was published, is not included. It is believed to be an early die state or a strengthened late die state of R.1-D

Note 3 Cents 1788 R.5-H, listed in Ryder and R.11-G added after Ryder are not included. None are known to exist.

Note 4: Cents 1787 R.1-B, R.5-I and R.7-H are believed to be contemporary counterfeit feits. Cent R.14-J is also believed to be a contemporary counterfeit.

FIG. 2

VERMONT RED BOOK TYPE SET
13 RED BOOK TYPES

RARITY R - 1 to R - 3 R - 4 to R - 5 R - 6 to R - 8

RYDER NUMBER

1785 Immune Columbia			RR-1
1785 Vermonts - Landscape	RR-2	RR-3	
1785 Vermontis - Landscape		RR-4	RR-5
1786 Vermontensium - Landscape	RR-6, RR-7	RR-8	
1786 Baby Head	RR-9		
1786 Mailed Bust Left	RR-10, RR-11		
1787 Mailed Bust Right	RR-12, RR-14		RR-32, RR-34
1787 Britannia	RR-13		
1787 Mailed Bust Left			RR-15
1788 Mailed Bust Right	RR-16, RR-20 RR-23, RR-24 RR-25, RR-27	RR-17, RR-19 RR-21, RR-22 RR-28, RR-29	RR-26, RR-33 RR-36, RR-37 RR-38
1788 MBR - ET LIB INDE Reverse		RR-18	RR-35
1788 MBR - Au>tori, Backwards C			RR-30
1788 Georgius III Rex		RR-31	

Note 1: Rarity ratings taken from the listing presented by Tony Carlotto at the C4 convention October 1996 and are based on the Sheldon scale.

Note 2: Struck and cast examples of RR-5 are known. They are believed to be contemporary counterfeits.

Note 3: RR-39 was added after Ryder was published. It is not a Vermont Red Book Type but is included under Connecticut for Red Book type purposes.

In future issues, I will present the listings for New Jersey, Connecticut and possibly other series.



The Rhode Island Ship Medal and Matthew Boulton

by John Lorenzo

Background

As Walter Breen indicates there are three varieties of this issue (reference 1). These are Breen Nos. 1138, 1139 & 1141. The vlugtende variety, the scraped off vlugtende variety and the ornament below the ship variety. As the table indicates the issues come in brass, pewter and silvered brass. There have been reported issues in copper but these in the opinion of the writer are brass specimens which have toned and cored to simulate a coppery appearance. The coring phenomenon will be talked about in greater detail further on in this paper. This paper will discuss these topics of this medal:

- * A confirmation of Breen on this issue being a non-local import;
- * An historical evaluation of this medal;
- * An overview of the types of issues and their metallurgical make-up. The Samuel Champion zinc enrichment process and the coring process will be discussed;
- * The Samuel Champion and Matthew Boulton connection will be discussed, based partly on archival data obtained from the Birmingham, England City Council which houses all of Matthew Boulton's works.

The Rhode Island Ship Medal - A Non-Local Import

Breen's comment that based on their preservation, these tokens circulated with other coppers, side by side with CONSTELLATIO NOVA (actually NOVA CONSTELLATIO is the proper order - reference 2) and various base Birmingham "hardware" at a time when anything of suitable size and weight would serve as small change.

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They come in all grades (rarely mint state), unlike medals, which were not usually spent (this is only partially true). In general, the often encountered brass specimens are usually in the higher levels of preservation. They do show some degree of circulation but not to a degree to distinguish these as medals or tokens. Obviously, since the main goal of this paper is to tie these issues with Matthew Boulton, the writer believes these issues to be of a medal character and not a token.

Breen indicates that the legends do not suggest local Rhode Island circulation or for that matter being manufactured in the Rhode Island colony. The writer agrees with their English nature based on an article the writer discovered in the newspaper "THE AMERICAN MUSEUM" originally published on June 6, 1786. Writing under the pseudonym NESTOR, the author comes down clearly on the side of a true federal coinage. But more than that, the implicit sense of the piece is that no local mint existed in Rhode Island prior to 1786 (reference 3). This writer's initial research article on the Rhode Island Ship Medal in the Publication "Penny-Wise" confirmed in this writer's mind that these medals were of an English origin and possibly did serve as tokens or some form of colonial currency due to the time they were issued in, when any coin-like object which made its way to the colonies took on some form of value.

A Historical Perspective

The historical conclusions portrayed by Breen in his "Encyclopedia" is still the best seen by this writer. Breen states that Admiral William Howe was sent on a detachment under General Henry Clinton to occupy Newport, RI on December 8, 1777. During the summer of 1778, about 10,000 American militia, under Major General John Sullivan, tried to retake Newport with the help of about 4,000 French troops under Admiral Comte d'Estaing. As the French began to disembark on August 9, 1778 at Conanicut Island (in Narragansett Bay, West of Newport), Admiral Howe arrived. Admiral d'Estaing hastily reembarked and went out to confront Howe; but as they jockeyed for battle positions a sudden storm dispersed both fleets. On August 20, d'Estaing limped back to Newport for repairs; on

August 30, the Americans, learning Of Howe's approach, abandoned the tiny island (the 1778 event alluded to on the obverse of the Ship token (Medal)). But 15 months later, on October 25, 1779, Howe himself had to abandon not Conanicut but Rhode Island itself., the event mentioned on the token's ship side, accounting for the word *vlugtende* originally present below the ship.

These comments by Breen are as accurate as any other seen by this writer and in their own way somewhat explain the different meanings of both the obverse and reverse of this coin.

Brass Production in Bristol

During the 1720's an important improvement was being introduced in the traditional brass-making process by Nehemiah Champion who had succeeded Abraham Darby in managing the Bristol Works, the leading and most innovative company in England for making brass at this time. In 1723 he registered his new method of making brass in Patent No. 454 in which the copper was granulated before being placed in the crucibles of the cementation furnace. The greater surface area of the granules, compared with the broken pieces used previously, was more easily permeated by zinc vapor from the calamine during the brass-making process. Because less zinc vapor was wasted a greater yield of brass was created from the same raw materials and in less time than formerly required. Using broken copper, it was said that 56 lb. of brass resulted from every 40 lb. copper after adding 56-60 lb. calamine. This increased weight represented the basis for the brassmakers' art, as much zinc in the calamine was inevitably lost in the process, owing to the difficulty of handling a substance which volatilized at such low temperatures. In present day terms the old Baptist Mill methods appear to have produced a brass of 72% copper to 28% zinc inclusive of any impurities present (reference 4). After the introduction of granulation to the process the works were said to have produced a brass of 66.7% copper to 33.3% zinc, approaching the most economical grade capable of being used in the company's products (reference 4).

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When we examine the two Rhode Island Ship Medals that went x-ray diffraction analysis in Michael Hodder's study of this medal, we find for the two vliegtende specimens that the zinc contents were of a very high level at 46.03% and 51.88% (reference 5).

These two values could be reached by Nehemiah's two sons John and William and their zinc enrichment process. These two individuals of course did not actually strike these medals, but it was their innovative process that Matthew Boulton utilized. But before we talk about Boulton, let's discuss the sons of Nehemiah Champion in detail.

Patent No. 1297

Champion's innovative approach was shared by his two sons John and William who were both actively engaged in the industry and responsible for introducing new zinc processes. The younger son William became interested in the problem of zinc production at an early age and visited several European countries to improve his knowledge of the subject. William Champion was only 20 years old when he returned to Bristol in 1730 to start a series of experiments. He aimed to replace imported supplies of the metal brought at high costs from the East to England, the impure "tutty" recovered from the furnace accretions of German lead-smelting furnaces not being available in England.

By 1738 William Champion appears to have solved the problem, having then applied for Patent No. 564 for "A method of invention for the reducing of sulfurous British minerals into a body of metallic sulfur. This obscure title covered his new large-scale technique for the production of metallic zinc. It was this process that disallowed the vaporous zinc to remain during the annealing process of brass. By 1748 at his new works at Warmley he had built his new zinc-smelting furnaces and water-powered plant for rolling, wire-drawing and battery-work. Unfortunately, Champion's attributes as a metallurgist did not carry over into his business skills. He went bankrupt in 1769. In 1781 the need for brass in England was very high, since only one other company in England was producing quality brass at this time. This was the Cheadle Co. in Cheshire. This

created a real need for brass in Birmingham and this was met by Matthew Boulton, who had assisted Champion in his works at Bristol, and Thomas Williams, the entrepreneur of new copper deposits which had been discovered in Anglesey (reference 4).

Following William Champion's bankruptcy, one of his managers, James Emerson, had set up his own business at Hanham with his own zinc-smelting furnaces on the pattern of those at Warmley. By 1781 he had patented a method of brass production using copper and metallic zinc. Under patent No. 1297, he described the process involving the granulation of both copper and zinc but it also included a small proportion of calcined calamine (ZnCO_3 :zinc carbonate) in what must have been a partial cementation process. Even though historical records do not provide the copper to zinc ratio obtained, it was probably this process that led to the copper/zinc composition of the Appleton-MHS and Garrett-Roper-Adams specimens.

Therefore, it was Emerson's patent which was responsible for the Rhode Island Ship Medals and not Champion's patent(s). However, without William Champion, who was Emerson's mentor, it is possible that Emerson would never have achieved any of this distinction. The writer feels compelled to call this a Champion-Emerson patent for the high enrichment zinc utilized in the RI medals.

This next section will involve a further look into some historical documents at the Birmingham City Council Library archives which further solidifies Boulton as the maker of these medals at his production site of Warmley utilizing his engineering-genius assistant James Watt.

Matthew Boulton - The Early Days

Matthew Boulton was born in 1728 at Snow Hill, Birmingham, the son of another Matthew Boulton, a manufacturer of steel buckles for shoes and kneebreeches. He duly entered his father's business, becoming a partner in 1749. His father died ten years later. In 1761-62 he built Soho Manufactory on Handsworth Heath, approximately one mile from Snow Hill, replacing an existing water mill, a rolling

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mill for metals, built over the Hockley Brook, a tributary of the River Tame. He then entered into partnership with John Fothergill until 1781 and together they produced also die-stamped metal buttons, steel jewelry and other trinkets. He also took up the manufacture of Sheffield Plate and then silver plate, being a prime mover in the establishment of the Birmingham Assay Office in 1773. Next year he purchased Dr. Roebuck's interest in James Watt's steam pumping engine with his patented external condenser. Although the Newcomen steam engine had been in use for about fifty years, it was very extravagant with coal and Watt's invention proved a great saving in steam and fuel. For in spite of popular belief, James Watt did not "invent the steam engine", but he certainly invented improvements which, with Boulton's, help, firmly launched steam power into the industrial world. Watt came to Soho in 1774 and re-erected there the engine on which he began working in Scotland. In 1775 Watt's patent was extended for 25 years and Boulton and Watt entered into partnership for the same period (reference 6).

In 1778 Boulton was already producing pattern coins and tried unsuccessfully to persuade the government to allow him to manufacture a new issue of regal copper (reference 7). Currently, the first recorded coinage Boulton manufactured was in 1786 whereupon Boulton set up two coining presses with which he produced 18 tons of copper coins for use in Sumatra where the East India Company, for whom he already had made several articles, had a factory, then meaning a trading establishment, at Bencoolen (Bengkulu) (reference 6).

Matthew Boulton was obviously in control and had full knowledge of this high zinc-enrichment process from Emerson's patent and had knowledge of the coin manufacturing process. No other individual at the time appears to have had the knowledge or the capability to produce a medal with a high zinc content as observed in these two "vlugtende" Rhode Island Ship Medals. Additionally, the appearance of these medals in pewter and silver plated (obverse-only) brass all correlate nicely with his total command of metallurgic skills, including silver plating and tin manufacturing. We already read about Boulton's experience with studying the Sheffield silver plating

process. And upon reviewing Boulton's collection of tin coins, medals, tokens and dies in the Assay Office of Birmingham, England illustrated in Figure 1 (reference 9), his knowledge in tin (pewter) is obvious. The next section is some further archival information which details and supports both the relationship between Boulton and Champion.

Matthew Boulton and John Champion - Warmley Brass Works

Currently, the Birmingham City Council Library Services (BCCLS) houses all of Boulton's papers. Within this archive of papers is a notation that between 1780 and 1790 Boulton received and/or was aware that Champion had a patent for making brass in spellor pots etc. They also show calculations by Boulton and Watt on raising water at Champion's mill operation using steam power instead of coal firing, and other schematics of an unclear purpose (reference 10, Figure 2). Boulton's assistant Watt obviously assisted the company with their need for steam power based on the engineering diagrams sent to the writer from BCCLS. The point is that since Champion's mill went bankrupt in 1769 and eventually the name was changed to the Bristol Brass Company, Boulton's relationship with this mill was obviously a long one.

Metallurgical Coring and Dezincification

A recent Rhode Island Medal in a Stack's sale (September, 1993, lot 891) had previously appeared in Paramount's sale of November 4, 1977 as a Rhode Island Medal struck in copper. Upon examination, the coin illustrated mint red copper in the fields and devices, but a yellowish (brassy) color within the deepest part of a recent hairline scratch on the coin. The cataloger did correctly identify the coin as a Rhode Island Medal struck in brass. But how can a coin with a coppery appearance be brass? This can be explained by two distinct metallurgical processes: coring and dezincification.

Coring is the result of two known principles of metallurgy. Pure metals freeze at a constant temperature, whereas solid solution alloys

TIN SQUEEZES OF VARIOUS DIES

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Contents of a wooden box labelled: "37 COPIES OF MEDALS IN TIN. JUNE 1899."

The impressions were taken directly from the dies by striking. Many of the squeezes have been clipped around the edge thus making it difficult to ascertain the exact diameter of the die. All show evidence, to a greater or lesser degree, of pitting due to the die having rusted. Some dies were cracked, one badly so.

1. 1810 Golden Jubilee of George III. T. Halliday. Rev.
2. 1814 Peace of Paris. T. Wyon Jnr. Obv.
3. 1815 Entry into Paris. N.G.A. Brenet. rev.
4. 1816 Sir Sidney Smith Pres. of the Knights of the White Slaves. Rev.
5. 1821 Coronation of George IV. T.I. Wells. Obv.
6. 1821 Coronation of George IV. T.I. Wells. Rev.
7. 1821 Death and Burial of Napoleon. F. Obv.
8. 1825 Copy of Warwick Vase presented to Mayor of Yarmouth. Rev.
9. 1827 Death of the Duke of York. H. Folkard. Rev.
10. 1828 Watt's double-acting steam engine. E. Thomason. Obv.
11. 1829 The Liberal Protestant Association. T.F. R.B. Obv.
12. 1829 Thomason's Metallic Vase. E. Thomason. Obv.
13. 1829 Thomason's Metallic Vase. E. Thomason. Rev.
14. 1830 Death of George IV. Rev.
15. 1836 Hareshaw Common Boundaries Perambulated. Obv.
16. 1836 Hareshaw Common Boundaries Perambulated. Obv.
17. 1838 Coronation of Queen Victoria. G.R. Collis. Rev.
18. 1840 Manchester Mech. Institution. 3rd Annual Exhib. G.R. Collis. Rev.
19. 1854 Miners' Benefit Society. G.R. Collis. Rev.
20. no date Brislington United Club. Rev.(?)
21. - Francis Bacon. Obv.
22. - Marshal von Blucher. M. Obv.
23. - Christ. G.R. Collis. Obv.
24. - Galileo Galilei. Gayrard. Obv.
25. - C. Linnaeus. Obv.
26. - John Locke. Obv.
27. - Isaac Newton. Obv.
28. - W. Shakespeare. Obv.
29. - Arthur, Duke of Wellington. Obv.
30. - Constantinople (?) Rev.(?)
31. - Edgbaston Archery Society. Rev.
32. - Horticultural prize medal(?) Rev.(?)
33. 1811? France. Napoleon and Marie Louise. Andrieu. Obv.
34. 1811 France. Birth of King of Rome. Andrieu(?) Rev. of no. 33?
35. 1832 France. Henri V, pretender. G.C. Obv.
36. 1797 U.S.A. George Washington. Presidency resigned. Rev.
37. 1811 England. 1/2d token. R. Warren, Japan liquid blacking. Obv.

Figure 1: Collection of Matthew Boulton medals struck in tin from the Assay Office of Birmingham, England. Paul Withers, November 1985, lot 859.



Birmingham City Council

Library Services

Your ref

Our ref

LORENZO.ARC/e/RR/JH

Date

2 November 1993

Mr J. Lorenzo



Dear Mr Lorenzo

Thank you for your letter of 8 October which has been passed to the Archives Division for answering since we hold the Matthew Boulton Collection. As requested, I have checked our lists and indexes for any references which may list the Rhodes Island Ship Medal with Boulton or Champion but I regret without success. The only references to John Champion that I have found in the archive have been incidental: a notebook of M. Boulton's (No. 27, P. 45 d.1780-1790) refers to the fact that "Champion says he has a patent for making brass in spell for pots etc." and in a box of memoranda there are papers on the Borough waterworks and John Champion's Mill at Bristol (item no's 136-142).

I have, therefore, passed a copy of your letter on to the British Museum in London in case they are able to help you further.

I am sorry not to be of more help to you in this matter.

Yours sincerely,



Rachel Roberts,
Archivist



Patricia M. Coleman, BA, ALA, FRSA.
Director
Central Library
Chamberlain Square
Birmingham B3 3HQ
England
Fax: 021-233 4458

Telephone calls to
Direct line 021-235

4217

Figure 2: Letter from Ms. Rachel Roberts, Archivist at Birmingham City Council Library, Birmingham, England.

are found to freeze over a wide range of temperatures. Hence, the first solid metal formed in the brass alloy as it cools is copper, because copper has the higher melting point; the zinc solidifies at a lower temperature. Such variable melting points can result in a very non-homogeneous ("coring") structure during the course of solidification. With extended heating of the alloy at a temperature below the melting points of its component metals, an equilibrium is usually accomplished. If this was not always carried out, there could have been metal shifting within the alloy.

The dezincification process is as follows: in certain alloys, and under certain environmental conditions (such as high humidity or an elevated temperature) localized areas or, in the case in question, the entire field of a coin, may be dissolved, leaving that particular area devoid of a given element in the alloy. The term dezincification was originally applied to the removal of zinc from brass by an existing corrosive environment. The term now applies to any condition of corrosion in which any specific element is removed from an alloy. On coins such as Rosa Americana specimens (reference 11) or the Rhode Island Medal, this results in a transformation from a yellow to a more coppery color (and also a considerable loss of alloy strength, with depletion of zinc from the alloy). More important for the numismatist, this loss of zinc results in a surface residue of the less-corrosive component copper. Many of the copper-zinc alloys, and some of the aluminum-bronze and copper-nickel alloys, undergo the same type of corrosion phenomenon. Conditions of high moisture or elevated temperatures make the dezincification process particularly active and destructive. The distinct copper layer on the coin in the Stack's sale, viewed under 15x magnification, was presumably the result of this process. The coin is definitely **NOT** copper plated.

Alloys containing more than 40% zinc are not very important today, because they are not very ductile. An alloy such as the Rhode Island Medal would need to have been hot-worked exclusively. Recognizing the very laborious process necessary to produce and then work this alloy leaves me with a new appreciation for these medals.

The Silver Plated RI Medals

Currently, I believe these to be genuine, but with some reservations. I personally reviewed one at the Baltimore ANA in 1993, and am aware of a second specimen, which are peculiar in that only the obverse is plated with silver. The silver plating covers approximately 85% of the obverse. Another example with bilateral silvering recently appeared in Bowers and Merena's Rarities sale, July 28, 1997, lot #1029. I have not had the opportunity to examine this specimen. Normally, a brass founder would introduce a trace of silver into the alloy, as William Wood did with the Rosa Americana's, for corrosion protection of the overall alloy. (Silver is much less corrosive than copper, which is in turn much less corrosive than zinc.) But why apply silver plating rather than hot-work silver into the brass?

Lot 2426 of the Norweb II sale (reference 11) was a silver plated bath metal example of a Rosa Americana penny. It showed the same type of silver loss as on both Rhode Island Medals, but showed silvering on both sides, however. The cataloguer of this Norweb silver pattern described this as "silvering probably applied at or near the time of striking". Similarly, these particular Rhode Island Ship medals are probably some experimental pattern tried out by Boulton. These specimens would be interesting x-ray diffraction candidates to determine their metallic content.

Conclusion

Matthew Boulton was really the only person who had direct contact with Champion's mill for a long duration of time. Champion held the patent on the only technology which could have produced the high level of zinc in the Rhode Island Ship medal. Furthermore, the style of the medal (a legend with the date at the end going around a pictorial design) is fairly typical of Boulton. It is recommended that the reader view Boulton's earlier works on medals, and the similarities will be apparent. Historically, based on the dating of the medals (1778/1779), it would be one of Boulton's earliest works. In addition, it was probably James Emerson, who had worked with

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Champion and refined the zinc-enrichment process under patent no.1297, that Boulton dealt with to obtain the highly zinc enriched brass needed to produce these medals. Due to Champion's unfortunate bankruptcy, Emerson took over the operation. The author feels however that since Emerson was Champion's understudy, Champion should obtain part of the credit for this alloy together with Emerson.

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Since 1935, the name *Stack's* has been linked to building great collections of colonial coins. Today's collectors take pride in owning colonials pedigreed to such great collections as Oechsner, Hessberg, Groves, Park, Robison, Eliasberg, Spiro, and Picker, to name just a few. We helped build each one of them. *Stack's* can help you build your own collection of colonials, be they coins or medals.

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